

# the t.racks

## TFX256 PRO Digital Effect Processor



ENGLISH

# User's Manual

## SAFETY PRECAUTIONS!

**WARNING - TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.**

Do not allow water or liquids to be spilled into this unit. If the unit has been exposed to rain or liquids, please unplug the power cord immediately from the outlet (with DRY HANDS) and get a qualified service technician to check it. Keep this unit away from heat sources such as radiators, heat registers, stoves, etc.

This unit contains no user-serviceable parts. Refer all service needs to a qualified service engineer through a Phonic dealer.



This triangle on your component alerts you to the presence of uninsulated “dangerous voltage” inside the enclosure that may be sufficient to constitute a risk of shock.

This triangle on your component alerts you to important operating and maintenance instructions in this accompanying literature.

### CAUTION:

**TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVERS (OR BACK). NO USER-SERVICEABLE PARTS ARE INSIDE. REFER ALL SERVICING TO A QUALIFIED SERVICE PERSONNEL.**

Keep this unit clean by using a soft dry brush and occasionally wiping it with a damp cloth. Do not use any other solvents, which may damage the paint or plastic parts. Regular care and inspection will be rewarded by a long product life and maximum reliability.

This unit was carefully packed at the manufacturing site and the packing box was designed to protect the unit from rough handling. We recommend that you carefully examine the packaging and its contents for any signs of physical damage which may have occurred during transportation.

If the unit is damaged: **Notify your dealer and the shipping company immediately.** Claims for damage or replacement may not be granted if not reported properly or in a timely manner.

# the t.racks

## DIGITAL EFFECT PROCESSOR TFX256 PRO

### USER'S MANUAL

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## INTRODUCTION

Congratulations on your purchase of the t.racks TFX256 PRO digital reverberator. The TFX256 PRO is a high quality and easy-to-use stereo digital reverberator. To take full advantage of the TFX256 PRO's functions, and enjoy a long and trouble-free use, please read this user's manual carefully and keep it for future reference.

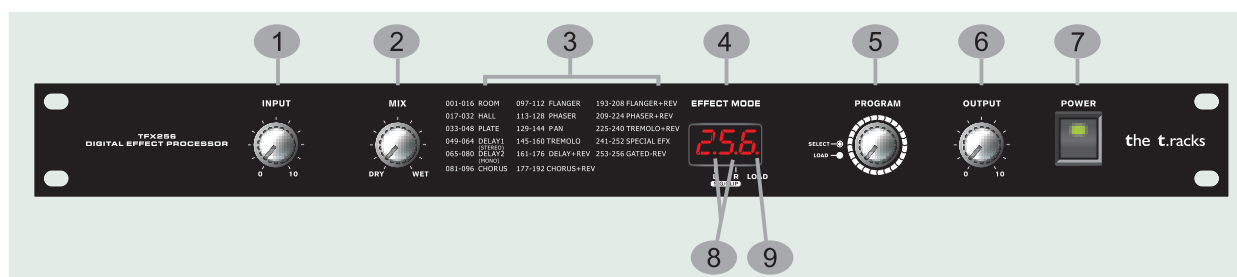
## FEATURES

- 256 effect programs available
- Programs include reverb, delay, flanger, chorus, tremolo, phaser, pan effects and combinations
- 32-40 bit digital signal processing plus 24 bit AD/DA conversions
- True stereo reverb
- Easy-to-read 3-digit LED display
- Compact 1U rack-mountable design
- Foot switch jacks allow the user to remotely activate and mute the effect
- Auto-bypass when power is off.
- Signal and clip LEDs allow easy setup of the optimum input level
- A professional quality digital reverb designed for musical instruments, recording, and sound reinforcement

## GETTING STARTED

1. Check the AC voltage before connecting the plug. Choose the main supply for the sound system with care. Do not share sockets or earthing with light dimmers.
2. Run audio cables separately from dimmer wiring, using balanced lines wherever possible. If necessary, cross audio and lighting cables at 90° right angles to minimize the possibility of interference. Keep unbalanced cabling as short as possible.
3. Check your cables regularly and label each end for easy identification.
4. Before switching on the main power, keep all output rotary faders all the way down to prevent damage or excessive noise caused by bad level adjustment, wrong wiring, defective cables, or bad connections.
5. Always turn on the TFX256 PRO before the power amplifier; turn off the TFX256 PRO after turning off the amplifier.
6. Always turn off the unit before connecting or disconnecting the unit to the power source.
7. Never use any solvents to clean the unit. Clean it with a soft, dry cloth.

## FRONT-PANEL DESCRIPTION



### 1 INPUT LEVEL CONTROL

The input level control sets the level going into the TFX256 PRO. You should set the level so that Peak (2) indicators only flash RED occasionally.

### 2 MIX (DRY / WET) CONTROL

This control sets the balance between the unaffected signal coming through the inputs and the effects being generated by the TFX256 PRO i.e. the balance of wet (effect) and dry (no effect) sounds. By keeping the Mix somewhere in the center, a blend of dry and wet signal can be achieved.

### 3 EFFECT MODES CHART

This chart shows you what 256 effect modes are in the TFX256 PRO.

### 4 LED DISPLAY

This 7-segment display indicates the current effect program in Program mode. When the display shows the letter “C” flashing, this means either the right or left input signals are too high and should be reduced.

### 5 PROGRAM SELECT KNOB

Turning this control will allow users to ‘preview’ the different digital effects. Pushing it in will load the preset. If this control is not pushed within a few seconds of changing the effect, the TFX256 PRO will automatically revert back to the previously loaded effect. When this control is held down for a few seconds, the digital effects will be bypassed. Holding it down again will reacti-

vate the effects.

### 6 OUTPUT LEVEL CONTROL

This rotary control sets the level going to the amplifier or mixer from the output of the TFX256 PRO

### 7 POWER SWITCH

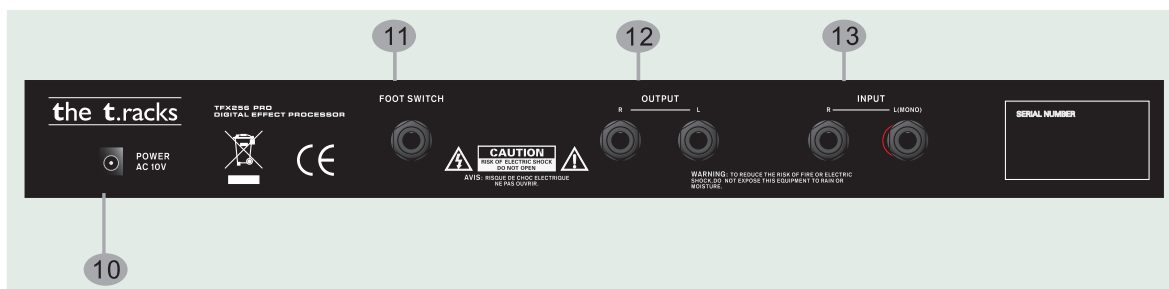
This switch turns the power of the TFX256 PRO on/off.

**When power is off, the TFX256 PRO will be in signal bypass position automatically i.e. this feature allows the direct signal to pass through the TFX256 PRO even when the power is not switched on.**

### 8 SIGNAL INDICATORS

These 2 small LED indicators, located within the digital effect display, show when either the left or right inputs are receiving a signal (the left LED indicates when the left input is receiving a signal, the right indicates when the right receives a signal). When the LCD display (above these indicators) flashes “C”, the signal in the left or right channel is excessive, and should be reduced to keep the audio’s integrity.

## REAR-PANEL DESCRIPTION



### 9 LOAD INDICATOR

This small LED indicator, located within the digital effect display, will flash when users are previewing different effects (when turning the program select knob). When a new program is loaded, this LED will stop flashing.

### 10 AC 10V IN INLET

The supplied AC Adapter is plugged into this connector.

### 11 FOOTSWITCH

This is a 1/4" stereo phone jack. If a foot switch is connected to this jack, you can use your foot

to switch the effect mute on/off (bypass).

### 12 OUTPUT (LEFT & RIGHT)

There are 1/4" phone jacks which connect to devices such as the effects returns on a mixing console or power amplifier inputs. For mono applications, use the “Left” output.

### 13 INPUT (LEFT/MONO & RIGHT)

There are 1/4" phone jacks which connect to sources such as the effects sends of mixing consoles. For mono applications, use the “Left/ Mono” input.

**PRESET PROGRAMS****EFFECT 1: ROOM**

7 Segment LED Room	ROOM	REV-TIME	PREDELAY	HI-RATIO	HPF	LPF	DRY/WET
1	1	0.05	40	0.5	80	2.5K	0~100
2	2	0.05	0	0.6	0	1.8K	0~100
3	3	0.4	0	0.95	382	9K	0~100
4	4	0.4	0	0.93	430	1.25K	0~100
5	5	0.45	5	0.95	500	12.5K	0~100
6	6	0.45	30	0.9	0	6.3K	0~100
7	7	0.6	0	0.9	550	2.36K	0~100
8	8	0.6	6	0.92	0	5.6K	0~100
9	9	0.65	22	1	0	19K	0~100
10	10	0.9	6	0.96	0	8K	0~100
11	11	1	10	1	500	20K	0~100
12	12	1.2	15	0.98	410	9.5K	0~100
13	13	1.4	60	0.98	0	5.6K	0~100
14	14	1.4	0	0.96	22	6.7K	0~100
15	15	1.6	22	1	0	10.6K	0~100
16	16	3.85	25	0.96	0	4.75K	0~100

**EFFECT 2: HALL**

7 Segment LED Hall	HALL	REV-TIME	PREDELAY	HI-RATIO	HPF	LPF	DRY/WET
17	1	0.9	0	0.9	0	9K	0~100
18	2	1	20	0.95	26	10.6K	0~100
19	3	1.95	40	0.98	0	15k	0~100
20	4	1.75	48	0.98	0	9.5K	0~100
21	5	1.8	20	0.83	0	4.25K	0~100
22	6	1.85	40	0.95	340	7.1K	0~100
23	7	1.9	30	0.98	675	8.5K	0~100
24	8	2.2	25	0.99	0	2.24K	0~100
25	9	2.3	100	0.7	0	6.7K	0~100
26	10	2.45	30	0.95	25	8.5K	0~100
27	11	2.5	40	0.8	85	12.5K	0~100
28	12	2.5	0	4	75	3.15K	0~100
29	13	2.7	85	1	40	12.5K	0~100
30	14	2.7	20	0.85	0	8K	0~100
31	15	2.8	40	0.97	0	8.5K	0~100
32	16	3.3	75	0.85	63	10K	0~100

**EFFECT 3: PLATE**

7 Segment LED Plate	PLATE	REV-TIME	PREDELAY	HI-RATIO	HPF	LPF	DRY/WET
33	1	0.55	0	1	625	20K	0~100
34	2	0.55	0	1	625	20K	0~100
35	3	0.75	20	1	0	12.5K	0~100
36	4	0.9	12	0.98	0	12.5K	0~100
37	5	1	10	1	0	10.6K	0~100
38	6	1.2	25	1	20	7.1K	0~100
39	7	1.3	35	1	0	20K	0~100
40	8	1.8	30	0.98	80	12.5K	0~100
41	9	2	1	1	67	20K	0~100
42	10	2.25	25	1	42	20K	0~100
43	11	2.6	180	0.97	0	15K	0~100
44	12	2.75	30	0.98	0	4.25K	0~100
45	13	3	0	1	625	20K	0~100
46	14	3	5	0.99	0	8K	0~100
47	15	3.35	1	0.98	0	16K	0~100
48	16	3.8	20	0.85	0	1.4K	0~100

**EFFECT 4: DELAY-1 (ST)**

7 Segment LED Delay-1(ST)	DELAY-1(stereo)	L-DELAY	R-DELAY	C-DELAY	FB-DELAY
49	1	0.16	0.03	0.03	0.04
50	2	0.16	0.08	0.16	0
51	3	0.16	0.08	0	0
52	4	0.16	0	0.18	0
53	5	0.16	0	0.16	0.14
54	6	0.16	0	0.16	0.2
55	7	0.16	0	0.16	0.21
56	8	0.52	0.2	0.5	0.3
57	9	0.6	0.2	0.6	0.4
58	10	0.6	0.2	0.6	0.4
59	11	0.8	0.3	0.5	0.7
60	12	0.21	0.2	0.2	0.1
61	13	0.14	0.05	0.16	0.16
62	14	0.25	0.05	0	0.5
63	15	0.03	0.06	0.06	0.05
64	16	0.3	0.06	0	0.6

**EFFECT 5: DEALY-2 (MONO)**

7 Segment LED Delay-2(MONO)	DELAY-2(mono)	L-DELAY	R-DELAY	C-DELAY	FB-DELAY
65	1	0	0	0.5	0.3
66	2	0	0	0.5	0.3
67	3	0	0	0.15	0.1
68	4	0	0	0.15	0.03
69	5	0	0	0.15	0.15
70	6	0	0	0.2	0.3
71	7	0	0	0.2	0.2
72	8	0	0	0.4	0.4
73	9	0	0	0	0.3
74	10	0	0	0	0.4
75	11	0	0	0	0.4
76	12	0	0	0	0.55
77	13	0	0	1.2	1
78	14	0	0	1.2	1.2
79	15	0	0	0.5	1
80	16	0	0	0.15	0.4

**EFFECT 6: CHORUS**

7 Segment LED Chorus	CHORUS	LFO	PER-DELAY	PHASE	LPF
81	1	0.3	2	180	7.1K
82	2	0.8	5	180	6K
83	3	1.2	20	0	8K
84	4	1.8	1	0	6.3K
85	5	2.2	60	180	10K
86	6	3.6	15	180	500
87	7	3.2	30	180	8K
88	8	4	90	0	1.25K
89	9	5.6	120	180	10K
90	10	6.4	200	0	1K
91	11	7.5	88	180	10K
92	12	7.8	80	180	500
93	13	8.4	50	0	10K
94	14	8.8	10	180	850
95	15	9.2	5	0	10K
96	16	10	115	180	10K



**EFFECT 7: FLANGER**

7 Segment LED Flanger	FLANGER	LFO	PER-DELAY	PHASE
97	1	0.1	2	180
98	2	0.3	6	0
99	3	0.6	10	180
100	4	0.7	15	180
101	5	1	1	180
102	6	1	10	180
103	7	1.6	20	180
104	8	1.6	20	180
105	9	2	1	180
106	10	2	2	180
107	11	2	2	180
108	12	2.6	2	180
109	13	2.8	6	180
110	14	2.8	4	180
111	15	4.6	2	180
112	16	4.6	4	180

**EFFECT 8: PHASER**

7 Segment LED Phaser	PHASER	LFO	DELAY	PHASE
113	1	0.1	3.5	180
114	2	0.4	0.6	90
115	3	0.8	3.2	180
116	4	1.4	0.6	180
117	5	2.2	1.6	180
118	6	2.6	4	180
119	7	3.3	1	180
120	8	4	2.8	180
121	9	4.8	1	180
122	10	5.2	0.1	180
123	11	5.8	0.8	180
124	12	6	1.2	90
125	13	6	3.2	180
126	14	7.2	5	180
127	15	7.8	2.6	180
128	16	10	5	180

**EFFECT 9: PAN**

7 Segment LED Pan	PAN	SPEED	DEPTH	TYPE
129	1	0.1	100	L-->R
130	2	0.4	100	L-->R
131	3	0.8	100	L-->R
132	4	1.2	100	L-->R
133	5	0.1	100	R-->L
134	6	0.4	100	R-->L
135	7	0.8	100	R-->L
136	8	1.2	100	R-->L
137	9	0.1	100	R<-->L
138	10	0.4	100	R<-->L
139	11	0.8	100	R<-->L
140	12	1.2	100	R<-->L
141	13	1.8	100	L-->R
142	14	1.8	100	R-->L
143	15	1.8	100	R<-->L
144	16	3.4	100	R<-->L

**EFFECT 10: TREMOLO**

7 Segment LED Tremolo	TREMOLO	SPEED	DEPTH
145	1	0.5	100
146	2	0.8	100
147	3	1	100
148	4	1.2	100
149	5	1.6	100
150	6	2	100
151	7	2.4	100
152	8	3	100
153	9	3.4	100
154	10	4	100
155	11	4.4	100
156	12	5.2	100
157	13	6	100
158	14	6.6	100
159	15	8	100
160	16	10	100

**EFFECT 11: DELAY + REV**

7 Segment LED Delay+Rev	DELAY+REV	DELAY-1	REV
161	1	1	ROOM1
162	2	2	ROOM7
163	3	3	ROOM11
164	4	4	ROOM12
165	5	5	ROOM14
166	6	6	ROOM15
167	7	7	HALL1
168	8	8	HALL3
169	9	9	HALL6
170	10	10	HALL11
171	11	11	HALL15
172	12	12	HALL16
173	13	13	PLAT1
174	14	14	PLAT3
175	15	15	PLAT6
176	16	16	PLAT12

**EFFECT 12: CHORUS + REV**

7 Segment LED Chorus+Rev	CHORUS+REV	CHORUS	REV
177	1	1	ROOM1
178	2	2	ROOM7
179	3	3	ROOM11
180	4	4	ROOM12
181	5	5	ROOM14
182	6	6	ROOM15
183	7	7	HALL1
184	8	8	HALL3
185	9	9	HALL6
186	10	10	HALL11
187	11	11	HALL15
188	12	12	HALL16
189	13	13	PLAT1
190	14	14	PLAT3
191	15	15	PLAT6
192	16	16	PLAT12

**EFFECT 13: FLANGER + REV**

7 Segment LED Flanger+Rev	FLANGER+REV	FLANGER	REV
193	1	1	ROOM1
194	2	2	ROOM7
195	3	3	ROOM11
196	4	4	ROOM12
197	5	5	ROOM14
198	6	6	ROOM15
199	7	7	HALL1
200	8	8	HALL3
201	9	9	HALL6
202	10	10	HALL11
203	11	11	HALL15
204	12	12	HALL16
205	13	13	PLAT1
206	14	14	PLAT3
207	15	15	PLAT6
208	16	16	PLAT12

**EFFECT 14: PHASER + REV**

7 Segment LED Phaser+Rev	PHASER+REV	PHASER	REV
209	1	1	ROOM1
210	2	2	ROOM7
211	3	3	ROOM11
212	4	4	ROOM12
213	5	5	ROOM14
214	6	6	ROOM15
215	7	7	HALL1
216	8	8	HALL3
217	9	9	HALL6
218	10	10	HALL11
219	11	11	HALL15
220	12	12	HALL16
221	13	13	PLAT1
222	14	14	PLAT3
223	15	15	PLAT6
224	16	16	PLAT12

**EFFECT 15: TREMOLO + REV**

7 Segment LED Tremolo+Rev	TREMOLO+REV	REV	TREMOLO
225	1	ROOM1	1
226	2	ROOM7	2
227	3	ROOM11	3
228	4	ROOM12	4
229	5	ROOM14	5
230	6	ROOM15	6
231	7	HALL1	7
232	8	HALL3	8
233	9	HALL6	9
234	10	HALL11	10
235	11	HALL15	11
236	12	HALL16	12
237	13	PLATE 1	13
238	14	PLATE 3	14
239	15	PLATE 6	15
240	16	PLATE 12	16

**EFFECT 16: SPECIAL EFX**

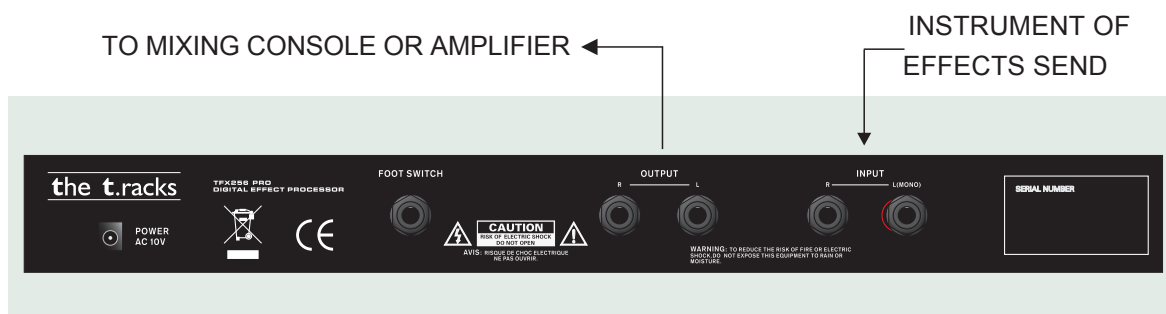
7 Segment LED Special efx	SPECIAL EFX		
241	1	DELAY-1-1	FLANGE-3
242	2	DELAY-1-1	CHORUS-4
243	3	DELAY-1-1	PHASER-7
244	4	CHORUS-2	FLANGE-1
245	5	CHORUS-5	PHASER-10
246	6	TREMOLO-6	FLANGE-11
247	7	TREMOLO-12	CHORUS-4
248	8	PHASER-5	FLANGE-9
249	9	PHASER-5	TREMOLO-12
250	10	FLANGE-1	TREMOLO-6
251	11	PHASER-7	PAN-2
252	12	PAN-2	FLANGE-3

**EFFECT 17: GATED + REV**

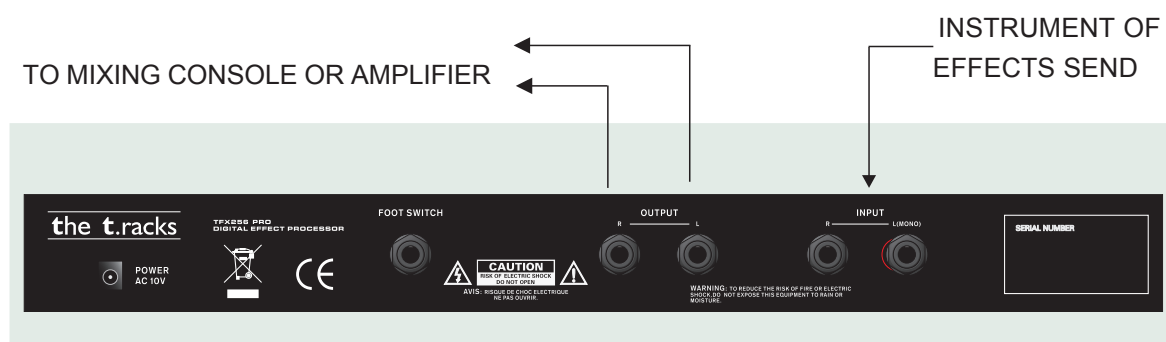
7 Segment LED Gated+Rev	GATED-REV	THRESHOLD	ATTACK	RELEASE	REV
253	1	-20	0	0.02	PLAT-1
254	2	-20	0	0.5	PLAT-8
255	3	-20	0	0.1	HALL-15
256	4	-20	200	0.01	HALL-16

## SAMPLE CONNECTIONS

**ONE MONO CORD IN, ONE MONO CORD OUT** (to an amplification system or mixer input)

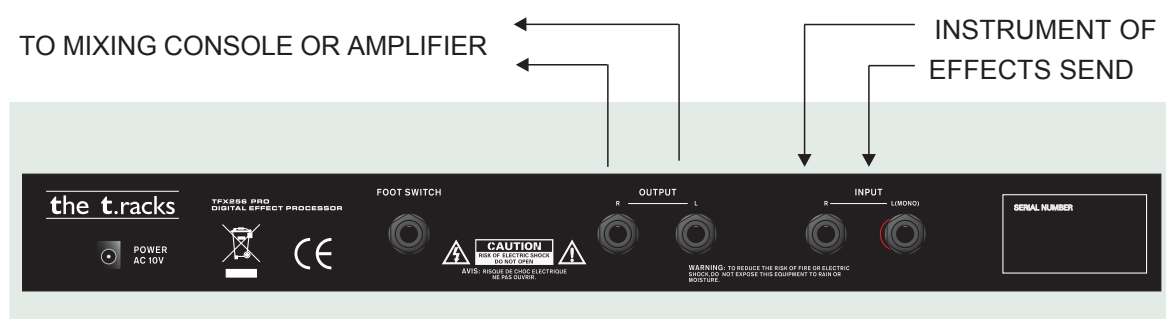


**ONE MONO CORD IN, TWO MONO CORDS OUT** (to a stereo amplifier or two mixer inputs)



**TWO MONO CORDS IN AND OUT** (to a stereo amplifier or two mixer inputs)

This can be stereo signal in/out or mono signal in/out.



## SEPCIFICATIONS

	TFX 256
<b>Frequency Response</b>	20Hz ~ 20kHz
<b>Dynamic Range</b>	90dB
<b>AD/DA</b>	24-bit
<b>DSP processing</b>	32~40-bit
<b>Sampling rate</b>	44.1kHz
<b>Maximum Input Level</b>	0dB
<b>Residual Noise</b>	< -80dB (20Hz ~ 20kHz)
<b>T.H.D.</b>	< .05% (typical)
<b>Input</b>	
Number of Channel:	2 (phone jack)
Nominal Level:	-20dB
Impedance:	20k ohms (mono: 10k ohms)
<b>Output</b>	
Number of Channel:	2 (phone jack)
Nominal Level:	-20dB
Impedance:	600 ohms
<b>Effect Programs</b>	ROOM HALL PLATE DELAY-1(stereo) DELAY-2(mono) CHORUS FLANGER PHASER PAN TREMOLO DELAY+REV CHORUS+REV FLANGER+REV PHASER+REV TREMOLO+REV SPECIAL EFX GATED-REV
<b>Front Panel Controls</b>	Input level, Mix-dry/wet, Program select, Output level, Power Sw.
<b>Real Panel Jack</b>	2 Input phone jacks, 2 Output phone jacks, foot Sw- phone jack, DC jack
<b>Dimensions (WxHxD)</b>	19"x1.75"x4.2" / 483 x 44 x 107mm (1U)
<b>Net Weight</b>	2.64 lbs / 1.2 kg

The specifications are subject to change without notice.